Pan Li

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EDUCATION

New York University, Stern School of Business

New York, NY

Ph.D. in Information System

(Expected) May 2023

Advisor: Alexander Tuzhilin

University of Science and Technology of China

Anhui, China

B.S., Mathematics & Computer Science (Special Class for the Gifted Young)

June 2017

INDUSTRY EXPERIENCE

Visiting Researcher, Google Brain	2022-2023
Research Intern, Alibaba Inc.	2019; 2020-2021
Research Intern, Sinovation Ventures	2017
Research Intern, Baidu Inc.	2016-2017

RESEARCH INTERESTS

- Personalization: Recommender Systems
- Artificial Intelligence: Deep Learning, Natural Language Processing
- Quantitative Marketing: Consumer Behavior Modeling
- Causal Inference: Controlled Experiment

JOURNAL PUBLICATIONS

- [1] Pan Li, Brian Brost, Alexander Tuzhilin, "Adversarial Learning for Cross-Domain Recommendations", Forthcoming at *ACM Transactions on Intelligent Systems and Technology* (TIST) (2022)
- [2] Pan Li, Alexander Tuzhilin, "Dual Metric Learning for Effective and Efficient Cross-Domain Recommendations", Forthcoming at *IEEE Transactions on Knowledge and Data Engineering* (TKDE) (2021)
- [3] Pan Li, Alexander Tuzhilin, "Learning Latent Multi-Criteria Ratings from User Reviews for Recommendations", *IEEE Transactions on Knowledge and Data Engineering* (**TKDE**), Volume: 34 Issue: 8, pp. 3854 3866 (2020)
- [4] Pan Li, Alexander Tuzhilin, "Latent Unexpected Recommendations", ACM Transactions on Intelligent Systems and Technology (TIST), 11(6), pp.1-25 (2020)
- [5] Chen Zhu, Hengshu Zhu, Hui Xiong, Chao Ma, Fang Xie, Pengliang Ding, Pan Li, "Person-Job Fit: Adapting the Right Talent for the Right Job with Joint Representation Learning", ACM Transactions on Management Information Systems (TMIS) 9, no. 3: 1-17 (2018)

JOUNRAL PAPERS UNDER REVIEW

- [1] Pan Li, Alexander Tuzhilin, "When Variety-Seeking Meets Unexpectedness: Incorporating Variety-Seeking Behavior into Design of Unexpected Recommender Systems" Under Third-Round Review at *Information System Research* (ISR) (after Major Revision)
- [2] Pan Li, Alexander Tuzhilin, "Exploring and Exploiting Consumer Preferences through Deep Reinforcement Learning and Latent Trajectory Modeling in Recommender Systems" Second-Round Major Revision at *Management Information System Quarterly* (MISQ)
- [3] Moshe Unger, Pan Li, Maxime Cohen, Brian Brost, Alexander Tuzhilin, "Deep Multi-Objective Multi-Stakeholder Music Recommendation", Under Second-Round Review at *Information System Research* (ISR) (after Major Revision)
- [4] Pan Li, Alexander Tuzhilin, "Killing Two Birds with One Stone: Deep Reinforcement Learning for Optimizing Multiple Objectives in Recommender System", Reject and Resubmit at Information System Research (ISR)
- [5] Moshe Unger, Pan Li, Shahana Sen, Alexander Tuzhilin, "Reconstructing Universal Embeddings of Customers from Domain-Specific Embeddings", Major Revision at *ACM Transactions on Management Information Systems* (TMIS).
- [6] Pan Li, Alexander Tuzhilin, "I want to know more!": Measuring the Impact of Triggering Consumer Curiosity in Recommender System", Under Review at *Marketing Science* (MKSC)
- [7] Pan Li, Maofei Que, Alexander Tuzhilin, "Dual Contrastive Learning for Efficient Static Feature Representation in Recommender System", Under Review at *IEEE Transactions on Knowledge and Data Engineering* (**TKDE**)

TOP-TIER CONFERENCE PUBLICATIONS

- [1] Pan Li, Zhichao Jiang, Maofei Que, Yao Hu, Alexander Tuzhilin, "Dual Attentive Sequential Learning for Cross Domain Click-Through Rate Prediction", *Proceedings of the 27th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* (KDD 2021) Full Paper with Oral Presentation; Acceptance Rate: 15.4%
- [2] Pan Li, Maofei Que, Zhichao Jiang, Yao Hu, Alexander Tuzhilin, "PURS: Personalized Unexpected Recommender System for Improving User Satisfaction", *Proceedings of the 14th ACM Conference on Recommender System* (RecSys 2020)

 Full Paper with Oral Presentation; Acceptance Rate: 18%
- [3] Pan Li, Alexander Tuzhilin, "DDTCDR: Deep Dual Transfer Cross Domain Recommendation", *Proceedings of the 13th International Conference on Web Search and Data Mining* (WSDM 2020)

Full Paper with Oral Presentation; Acceptance Rate: 15%

[4] Pan Li, Alexander Tuzhilin, "Towards Controllable and Personalized Review Generation", Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing (EMNLP 2019)

Full Paper with Poster Presentation; Acceptance Rate: 24.6%

- [5] Pan Li, Alexander Tuzhilin, "Latent Multi-Criteria Ratings for Recommendations", Proceedings of the 13th ACM Conference on Recommender Systems (RecSys 2019) Short Paper with Poster Presentation; Acceptance Rate: 19%
- [6] Pan Li, Alexander Tuzhilin, "Latent Modeling of Unexpectedness for Recommendations", Proceedings of the 13th ACM Conference on Recommender Systems (RecSys 2019)

 Late-Breaking Result Track Paper with Poster Presentation; Acceptance Rate: 31%
- [7] Tong Xu, Hengshu Zhu, Chen Zhu, Pan Li, Hui Xiong, "Measuring the popularity of job skills in recruitment market: A multi-criteria approach", *Proceedings of Thirty-Second AAAI Conference on Artificial Intelligence* (AAAI 2018)

 Full Paper with Poster Presentation; Acceptance Rate: 24.6%

TEACHING EXPERIENCE

New York University

New York, NY

Instructor for "Data Science for Business"

Summer 2022

- Teaching Evaluation: **5.0/5.0** (instructor) **4.7/5.0** (course)
- In-person interactive teaching based on lectures, hands-on sessions and case studies
- 15 undergraduate students enrolled

New York University

New York, NY

Teaching Fellow for "Introduction to AI & Its Applications in Business" Spring 2020, 2021

- Co-design the class materials, homework assignments and final project with the instructor
- Lead of the lab session for 60 students (MSBA and MBA-level)

INVITED TALKS

- [1] "Consumer Preference Exploration in Recommender System", IS Student Presentations Over the Cloud (ISPOC), Virtual, August 2022
- [2] "Recent Progress on Consumer Exploration", Invited Talk at Google Brian, August 2022
- [3] "I want to know more!": Measuring the Impact of Triggering Consumer Curiosity in Recommender System", ISMS Marketing Science Conference, Virtual, June 2022 (ISMS 2022)
- [4] "Reconstructing Universal Embeddings of Customers from Domain-Specific Embeddings", ISMS Marketing Science Conference, Virtual, June 2022 (ISMS 2022)
- [5] "Dual Learning for Cross-Domain Recommendations", Invited Talk at TikTok, April 2022

- [6] "Exploring and Exploiting Consumer Preferences through Deep Reinforcement Learning and Latent Trajectory Modeling in Recommender Systems", *The 31st Workshop on Information Technology and Systems, Austin, TX, December 2021* (WITS 2021 Doctoral Consortium)
- [7] "Multi-Faceted Consumer Preferences: Incorporating Unexpectedness and Cross-Domain Information into Design of Recommender System", *The 31st Workshop on Information Technology and Systems, Austin, TX, December 2021* (WITS 2021)
- [8] "Unexpectedness in Recommender Systems", Invited Talk at Alibaba, September 2021
- [9] "Leveraging Multi-Faceted User Preferences for Improving Click-Through Rate Predictions" ACM Conference on Recommender Systems, Virtual, September 2021 (RecSys 2021 Doctoral Consortium)
- [10] "When Variety-Seeking Meets Unexpectedness: Incorporating Variety-Seeking Behavior into Design of Unexpected Recommender Systems", *Conference on Information Systems and Technology, Anaheim, CA, October 2021* (CIST 2021)
- [11] "Incorporating Dual Metric with Sequential Learning for Cross-Domain Recommendations", Conference on Information Systems and Technology, Anaheim, CA, October 2021 (CIST 2021)
- [12] "When Variety-Seeking Meets Unexpectedness: Incorporating Variety-Seeking Behavior into Design of Unexpected Recommender Systems", *ISMS Marketing Science Conference*, *Virtual, June 2021* (ISMS 2021)
- [13] "Adversarial Learning for Cross-Domain Recommendations", *The 30th Workshop on Information Technology and Systems, Virtual, December 2020* (WITS 2020)
- [14] "Will Unexpectedness Help Recommendations and When: Evidence from A Large-Scale Online Controlled Experiment", Conference on Information Systems and Technology, Virtual, October 2020 (CIST 2020)
- [15] "Dual Learning for Cross-Domain Recommendations: Improving Efficiency and Effectiveness of Recommender Systems", *Conference on Information Systems and Technology, Virtual, October 2020* (CIST 2020)
- [16] "Hybrid Utility Function for Unexpected Recommendations", *International Conference on Web Search and Data Mining, Houston, TX, February 2020* (WSDM 2020 Doctoral Consortium)

AWARDS

NYU Fubon Doctoral Fellowship	2022-2023
INFORMS Marketing Science Doctoral Consortium	2022
WITS Conference Best Dissertation Award	2021
WITS Conference Best Student Paper Runner-Up Award	2021

SIGIR Travel Award

NYU Stern PhD Fellowship

2020
2017-2022

ACADEMIC SERVICE

Program Committee: INFORMS Workshop on Data Science, ACM Conference on Recommender System, Empirical Methods in Natural Language Processing

Invited Reviewer: Management Science, IEEE TKDE, ACM TIST, ACM TMIS, IEEE Intelligent System, ACL, EMNLP, ICIS, CIST, WITS

SELECTED COURSEWORK

 Research Seminar in Data Science 	(by Foster Provost)
 Research Seminar in Digital Economics 	(by Arun Sundararajan)
 Research Seminar in IT & Organizations: Social Perspectives 	(by Natalia Levina)
 Behavioral Research Method 	(by Joel Steckel)
 Causal Inference 	(by Jennifer Hill)
Econometrics I & II	(by William Greene)
 Deep Reinforcement Learning 	(by Lerrel Pinto)
 Convex Optimization 	(by Jiawei Zhang)
 Stochastic Calculus 	(by Paul Bourgade)
 High Performance Machine Learning 	(by Alessandro Morari)